

Sub D²

Please amend Claims 17 and 29 as follows:

17. (amended) A trench DMOS transistor cell, comprising:
a substrate of a first conductivity type, said
substrate having a surface;

an epitaxial layer of said first conductivity type
formed on [the] said surface of said substrate, said
epitaxial layer having a top surface and a bottom surface,
said epitaxial layer having a substantially uniform
initial dopant concentration at formation;

a body region of a second conductivity type formed in
said epitaxial layer, said body region extending, as
measured from said top surface of said epitaxial layer, to
a first depth d_{max} at a first [point] location and to a
depth of d at a second [point] location, where d is less
than d_{max} , said first and second [point] locations being
separated by a predetermined horizontal distance;

a source region of said first conductivity type
formed in said epitaxial layer above a portion of said
body region, said portion of said body region being
located between said second location and said source
region; and

a trench formed in said epitaxial layer extending
from said top surface of said epitaxial layer [through
said source and body regions] to a depth d_{tr} , said depth
 d_{tr} being less than said depth d_{max} , and greater than said
depth d , said trench being closer to said second [point]
location than said first [point] location, said trench
being horizontally adjacent said source region.

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~~12~~ 29. (amended) A trench DMOS transistor cell as in Claim
~~17~~, wherein said substrate has a dopant concentration higher
than [the] said initial dopant concentration of said epitaxial
layer [outside of said body and source regions], said substrate

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